# Chapter 531. REGULATIONS FOR WASTEWATER OPERATOR CERTIFICATION PROGRAM PROGRAM

SUMMARY. These rules establish the criteria that a person must meet in order to be certified as an operator of a wastewater treatment plant. Treatment plants are classified <u>as Grades I-V Biological Treatment</u>, <u>Grade I-III Physical/Chemical Treatment</u>, or <u>Spray Irrigation Treatment System</u> according to population equivalents <u>and/or</u> type of treatment. Certification for each operator Grade I-V <u>Biological</u>, <u>Grade I-III Physical/Chemical or Small or Large Spray Irrigation Treatment Systems</u> is based on education and experience. There are provisions for substituting education for experience as well as certain work experience for actual treatment plant experience.

#### 1. General Conditions

- **A.** <u>Applicability. A PpPersonss</u> who <u>are is are an operators of a wastewater treatment plantss which requires a certified operators under the provisions of Title 32, MRSA, Chapter 62, <u>are is</u> subject to these <del>regulations</del> rules.</u>
- **B.** Contract Operators. All proposed contracts for facility operation by any firm or individual must be approved by the Maine Department of Environmental Protection (Department) before the licensee may engage the services of the contract operator before the licensee may engage the services of the contract operator. within 2 weeks of the contractor being retained by the permittee. The guidelines for the review of operational contracts are available upon request.
- C. Provisional Certification. Graduates of the New England Regional Wastewater Institute at Southern Maine Vocational Technical Institute, South Portland, Maine (now Southern Maine Community College); the Environmental Technology Course at Eastern Maine Vocational Technical Institute, Bangor, Maine (now Eastern Maine Community College); or other equivalent programs, are eligible for Grade III or lower examination and certification. The examination shall shall-must be as administered by the State of Maine State of Maine Department of Environmental Protection of Environmental Protection. Such certification shall be provisional pending successful completion of one year of work experience in a Grade II or higher treatment facility under the direct supervision of a fully certified operator. Following this year, a full certificate may be requested. The Department of Environmental Protection shall then evaluate the quality of the work experience. This evaluation shallmust determine the operators overall proficiency in operations and maintenance of wastewater treatment systems, process control, laboratory procedures and sludge handling processes. If\_satisfactory, a full certificate will be awarded. This provisional upgrade must be requested, it is not automatic.
- **D.** Applicability to Professional Engineers. Violation of 32 M.R.S.A. Chapter 62 [§§4171 through §4182], Sewage Treatment Operators, by an operators who are are is a registered professional engineers will be reported to the Maine State Board of Registration for Professional Engineers.
- **E.** <u>Display of Certificate.</u> The wastewater treatment plant operator's certificate issued by the Department of Environmental Protection will of Environmental Protection will in a prominent location at the operator's place of work.

F. Qualification to Operate Plants by Grade. All!! wastewater treatment plant operatorss, except those qualifying under 32 MRSA Section 4177, who is certified by the Department of Environmental Protection shall be of Environmental Protection shall considered be qualified to operate a plant grade equal to or lower than the certificate grade. An OoOperators qualified under 32 MRSA Section 4177 ais re-only permitted to operate the plant in which they were they werehe or she was employed at the time the certificate was issued.

#### 2. Classification of Wastewater Treatment Plants

A. Classification of Biological Treatment Plants. All biological wastewater treatment plants will be will beis classified on a population equivalent (P.E.) of 0.2 lbs. of Biochemical Oxygen Demand (BOD) and 100 gallons per person per day. The treatment plant design capacity will be the major classification criteria in determining such population equivalents. Plant grade will be determined on the following basis except as noted in Section 2C(C).

	Secondary-	Advanced	Other Defined
Size (P.E.)	Biological	Treatment*	Treatment**
Up to 5,000	II	III	I
5,000 to 15,000	III	IV	II
15,000 to 50,000	IV	V	III
50,000 and over	V	V	IV

<sup>\*</sup>Advanced treatment includes one or more of the following.

- 1. Advanced biological/chemical methods; and/orand/or
- 2. Ion Exchange, Reverse Osmosis or Electrodialysis; and/and/oror,
- 3. Chemical recovery or Carbon regeneration.

- 1. Separate sludge digestion with gas collection; and/and/or,
- 2. Mechanical sludge dewatering or sludge incineration.
- **B.** Classification of Physical/Chemical Treatment Plants. B. All physical/chemical treatment plants will be will be classified by the Department of Environmental Protection following a standard evaluation of the facility. These facilities will be classified as Grades I, II, or III.
- C. Classification of Spray Irrigation Treatment Plants. A tTreatment systems including one or more stabilization ponds followed by spray irrigation with no direct discharge to a surface water body are classified as Spray Irrigation Treatment Systems (SITS).
  - A Spray Irrigation Treatment Systems used to treat only domestic sanitary wastewater having a spray irrigation site size of 10 acres or less are classified as Grade I Spray Irrigation Systems (SITS-I)
  - 2. All other Spray Irrigation Treatment Systems are classified as Grade 2 Spray Irrigation Systems (SITS-II).

<sup>\*\*</sup>Other defined treatment includes one or more of the following.

CD.Upgrade of Downgrade of Plant Classification. C. The Department may upgrade or downgrade individual plants if, in its opinion, the complexity of the plant and degree of skill required for its operation are not properly accounted for in the above categories.

# 3. Requirements For Certification

- A. Operator Grades Five Five grades of biological treatment system operators, three grades of physical/chemical treatment system operators and two grades of Spray Irrigation Treatment System operators are hereby established to parallel the previously described classification of wastewater treatment plants.—Grade I certified operators shall be considered to be qualified to supervise the operation of Grade I plants; Grade II certified operators shall be considered as qualified to supervise the operation of Grade II or lower plants; etc. A Grade I certified operator shall be considered to be qualified to supervise the operation of a Grade I plants; a Grade III-V certified operator shall be is considered as qualified to supervise the operation of Grade III-V or lower plants; etc. A pPerson certified to operate a Spray Irrigation Treatment Systems shall be considered as qualified to supervise and operate only systems meeting the criteria established by the Department. A pPerson currently certified asto operate a Grade II biological treatment system or higher may operate a Spray Irrigation Treatment Systems without obtaining additional certification.
- **B.** Qualifications for Certification. Each applicant shall satisfy the experience requirements for the grade of certification requested. Education may be substituted for experience as set forth below. Educational substitutions will be based on the following.
  - (1) High school education or equivalent is credited for two years of experience.
  - (2) Post high school education in approved areas of engineering, science and/or related fields. 30 semester hours, or equivalent, equals 1 year.
  - (3) (3)—Specialized training courses will be evaluated on the basis of training credits; six classroom hours of approved courses equals one credit, 45 credits equals one year. Examples. 36 hour course = 6 credits; Sacramento Course = 15 credits per volume.
  - (4) A person attending a cCourses approved by the Department where attendance credit is given in Continuing Education Units (C.E.U.s) wilis credited with 10 training hours for each C.E.U. earned.
- (4) (4)(5) All experience and/or education submitted in support of applications which that is not specified in this section shall be evaluated on an individual basis.
- **C.** Examination Requirement. Qualifying examinations are required of all applicants for certification. Persons holding valid certificates in other states may be certified at a comparable grade level without examination, providing all other requirements are met. The applicant must have passed a written examination in the other state before reciprocity can be granted. The other state must also grant reciprocity to operators certified by the State of Maine.
- **D.** <u>Types of Certificates.</u> Certificates will be issued attesting to the holder's ability to operate one <u>or more</u> of <u>two\_two\_three\_general</u> types of treatment systems.

B = Systems utilizing biological means of treatment;

P/C = Systems utilizing physical and/or chemical means of treatment; or,

SITS = Systems using spray irrigation as the means of treatment.

<u>A Cc</u>Certificatess authorizes the holder to operate only that type system for which the certificate was issued.

## E. General Requirements and Definitions:

- (1) An AaApplicants for all certificates must must is required to pass an examination for that grade.
- (2) Work experience in a treatment plant is defined as that gained in actual performance of important operating functions within any wastewater treatment facility.
- (3) Work experience in a related field includes <u>activities such as plant operation</u>, pilot studies, design, planning, wastewater treatment plant construction, related laboratory work, etc., etc. with the type of process applied for. <u>Activities must be of a kind related to the type with the type of treatment process indicated in the application applied for.</u>
- (4) See Section 3(B) for educational substitutions.— Note: Note: High school education is not considered related education for certification purposes.
- (5) Grade I Operator

<u>The AAapplicantss</u> for this grade <u>must-shall</u> submit satisfactory evidence of graduation from high school or at least two years experience operating a wastewater treatment plant.

## (6) Grade II Operator

- (A) <u>The AaApplicantss</u> for this grade <u>must shall</u> submit satisfactory evidence of at least four years experience in a wastewater treatment plant. Education may be substituted for no more than three years of experience; or
- (B) Submit satisfactory evidence of three years of related education and one year of related work experience.

#### (7) Grade III Operator

- (A) <u>The AaApplicantss</u> for this grade <u>must shall</u> submit satisfactory evidence of at least five years experience in a wastewater treatment plant. Education may be substituted for no more than three years of experience; or
- (B) Submit satisfactory evidence of at least three years of related education and two years of related work experience.
- (8) Grade IV Operator

- (A) <u>The AaApplicantss</u> for this grade <u>must shall</u> submit satisfactory evidence of at least six years eexperience in a wastewater treatment plant, three years of which must have been as operator of a Grade II or higher plant. Education may be substituted for no more than three years of experience; or
- (B) Submit satisfactory evidence of at least four years of related education and two-three years of related-work experience at a Grade II or higher plant.

# (9) Grade V Operator

- (A) <u>The AaApplicantss</u> for this grade <u>must-shall</u> submit satisfactory evidence of at least eight years experience in a wastewater treatment plant, four years of which must have been as operator of a Grade III or higher plant. Education may be substituted for no more than four years of experience; or
- (B) Submit satisfactory evidence of at least <u>five\_four\_years</u> of related education and <u>three four\_years</u> of <u>related\_work experience\_at a Grade III or higher plant</u>.

# (10) Grade SITS - I and Grade SITS - II Operator

AThe applicants for this grade mustshall submit satisfactory evidence of graduation from high school or at least two years experience operating a Small Spray Irrigation treatment system.

**F.** Advanced Treatment Examination. In addition to satisfying the minimum requirements for operating plants of the appropriate grade level, the operators of an advanced treatment plants must demonstrate by passing an examination approved by the Department, that he or she possesses special knowledge of advanced wastewater treatment. Applicants passing such examinations will be awarded certificates so indicating.

#### 4. Certification Procedure

- A. Application Requirements. All—candidatess for a wastewater treatment plant operator's certificate must must—shall complete an application as furnished by the Department—of Environmental Protection of Environmental Protection. The notarized application, with appropriate fee, should should—must be forwarded to the address specified by the Department office in Augusta, Maine. A cCompleted applications with all supporting documentation must be received at least six weeks prior to the examination date. Applications received after the published application date will be held for the next examination period.
- **B.** Application Process. An AaApplicants having the necessary qualifications, as set forth in Section 3, for initial certification or for upgrading present classification, will be notified of the scheduled time and place of examination. An AaApplicants not possessing the necessary qualifications for the requested grade will be allowed to reapply for such a lower grade as qualified besed on their his or her education and experience qualify them. An AaApplicants may be examined up to three months prior to being fully qualified for the desired grade.
- **C.** Reexamination. In the event that an applicant fails to pass an examination, the applicant may be re-examined in the same or lower grade after six months, or for certification in a lower grade in

the same grade after six months, or for certification in a lower grade at the next scheduled examination.

#### D. Fee Schedule.

- Initial certification	\$30.00	\$30.00
Re-examination in same grade	15.00	Ψ30.00
Riannial rangual fag	20.00	
Reinstatement of certificate 30.0	20.00 00\$20.00	
Remstatement of certificate 50.0	<del>U33U.UU</del>	

- **ED.** Training Requirement. The Department of Environmental Protection shall issue a permanent certificate indicating the classification level of treatment system for which the individual is qualified to act as operator. Certification must be renewed on a biennial basis. Certificate holders with a Grade I-V Biological Wastewater Treatment Plant Operator Certificates, a Grade I-III Physical/Chemical Wastewater Treatment Plant Operator Certificates, or a SITS-II Spray Irrigation Treatment System Operator Certificates shall be required to show proof of completion of at least eighteen eighteen (18) clock hours of training during the period that their their his or her current certificate was in effect before the certificate may be renewed for the next biennial period. No more than six (6) hours of safety training may be used to comply with this requirement. A cCertificate holder with SS-1 Spray Irrigation Treatment System Operator Certificates shall be is required to show proof of completion of at least six6 clock hours of training during the period that their current certificate was in effect before the certificate may be renewed for the next biennial period. The Department may require an operators who performs permit compliance laboratory work in a facility and who does not adequately demonstrate proper sampling and analysis procedures and techniques during regular compliance inspections to attend additional approved laboratory training. This training must be approved by the Division of Water Resource Regulation Division of Water Resource Regulation Bureau of Land and Water Quality. A list of approved courses is available upon request.
- **FE.** Maintenance of Current Address. Each CcCertificate holders shall be responsible for maintaining a current address on file with the Division of Water Resource Regulation Division of Water Resource Regulation Bureau of Land and Water Quality. Address changes should must be submitted to this divisiondivision—Bureau at least two months prior to the expiration of the current renewal period. This certificate will be valid continuously when biennial renewal requirements are satisfied prior to the expiration of the current renewal period, unless otherwise revoked as provided by 32 M.R.S.A. Section §4175.

## 5. Failure To Renew; Reinstatement

- A. <u>Failure to Renew.</u> A <u>CcCertificatess</u> which <u>are is</u> not renewed by the deadline for renewal <u>shall</u> shall becomes inactive. No person, firm or corporation, either municipal or private, may rely on an inactive certificate to satisfy the requirement of 32 M.R.S.A. <u>Section §4181</u>.
- **B.** Reactivation within Six Months of inactivation. A CcCertificate holders who allows their their his or her certificatess to lapse shall be reinstated if they they he or she pays the reinstatement an appropriate administrative fee and shows proof of completion of at least eighteen the clock hours of approved training required in Section 4(D) during the period from two years before to six months after the renewal deadline.

- C. Reactivation after Six Months of inactivation. A CCertificates certificates that have have has been inactive for more than six months but less than two years may be reinstated if the certificate holder pays the reinstatement an appropriate administrative fee and meets all the requirements for initial certification specified in Section 3. Provided that Provided that However, the Department of Environmental Protection may, in its discretion, waive the examination requirement, if it finds that the holder of the certificate has performed his or her duties satisfactorily and in a manner that demonstrates that an examination is not necessary.
- **D.** Loss of Certification. A CcCertificate holders who allows their their his or her certificates to remain inactive for two years or longer shall shall—be removed from the master list of certified operators as maintained by the Department. A certificate holder whose name has been so deleted shall be is—required to shall be required to submit an application for initial certification and examination to be certified in the future.
- 6. Applicability of Certificates. All certificates issued prior to the effective date of these regulations shall authorize the holder to operate biological treatment systems of the grade indicated on the certificate or lower.
- 7. Effective Date. These regulations shall be effective upon the date of filing with the Secretary of State and shall supersede all previous regulations adopted by the Board dealing expressly with the certification of wastewater treatment plant operators.
- After public notice and public hearing November 21, 1977, the above regulations are hereby adopted this 21st day of December, 1977.
- **6.** Applicability of Certificates. All certificates issued prior to the effective date of these regulations shall authorize the holder to operate biological <u>wastewater</u> treatment systems of the grade <u>and type</u> indicated on the certificate or lower.
- 7. Effective Date. These regulations shall be effective upon the date of filing with the Secretary of State and shall supersede all previous regulations adopted by the Board dealing expressly with the certification of wastewater treatment plant operators.

After public notice and public hearing November 21, 1977 2????, 2004, the above regulations are hereby adopted this 21st day of December, 1977 2????, 2004?.

AUTHORITY. 32 M.R.S.A. Section 4179 and 38 M.R.S.A. Section 361

EFFECTIVE DATE. March 28, 1975

Amended. May 20, 1977 Amended. February 8, 1978 Amended. May 4, 1984 Amended. May 11, 1987

Amended.